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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,384	05/11/2001	Roy Brooks	CSCO- 3768	8633

7590 07/26/2005  
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EXAMINER

KADING, JOSHUA A

ART UNIT PAPER NUMBER

2661

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/854,384

Applicant(s)

BROOKS ET AL

Examiner

Joshua Kading

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-33 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 10-12, 15, 16, 19-21, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 8, 9, 13, 14, 17, 18, 22, 23, 26 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 10 is directed toward a computer system network as well as a "processor for executing a method...said method comprising the steps of..." This creates confusion because it is not clear whether applicant is directing the claimed invention toward an apparatus (i.e. the computer system network) or a process (i.e. the method). It should be noted that it is permissible to give functionality to components of an apparatus claim, however this must be done with proper claim language. The following is an example of a proper way to give a component of an apparatus claim functionality: "a processor...wherein said processor initiates..."

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6, 7, 10-12, 15, 16, 19-21, 24, and 25 are rejected under 35

U.S.C. 102(e) as being anticipated by U.S. Patent 6,564,267 B1, Lindsay.

It should be noted that claim 10 will be treated as an apparatus claim with the processor having the functionality as defined in the claim.

Regarding claims 1, 10, and 19, Lindsay discloses a computer readable program code (*col. 2, lines 59-61*) in "a computer system in a computer system network, said computer system comprising: a bus (*figure 7*); a memory unit coupled to said bus (*figure 7, element 68*); and a processor coupled to said bus (*figure 7, element 70*), said processor for executing a method for simulating transmission control protocol streams in a network, said method comprising the steps of: a) initiating at least one transmission control protocol session, said transmission protocol session requiring acknowledgement and operable to transmit data packets, said transmission control protocol session comprising a current window size and a maximum window size, said current window size defining an amount of unacknowledged data actually being sent, said maximum window size defining an amount of unacknowledged data that can be sent (*figure 5 shows the initiation of a transmission using TCP where there is a given window being used that inherently has a maximum size and the unacknowledged data that is sent is the IP data transmitted with TCP; col. 12, lines 12-16 further show that the current window size indicates that the amount of data waiting to be acknowledged and the*

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*remaining window is therefore data that can be sent, i.e. data that is unacknowledged);*  
and b) initiating an unacknowledged traffic stream for the transmission control protocol session, wherein said unacknowledged traffic stream is controlled by said transmission control protocol session such that said unacknowledged traffic stream simulates acknowledged traffic stream (*figure 5 shows the unacknowledged stream of IP data transmitted with TCP for use in acknowledging the data*)."

Regarding claims 2, 11, and 20, Lindsay discloses, "wherein said method is configured to operate on a high speed network (*col. 4, lines 58-61*)."

Regarding claim 3, 12, and 21, Lindsay discloses, "wherein said high speed network is configured to operate on a fiber optic network (*col. 4, lines 58-61*)."

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 7, 15, 16, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay.

Regarding claims 6, 15, and 24, Lindsay discloses, "wherein said maximum window size" has a given size (*figure 13, element 172 shows that the window has a maximum remote size*). However, Lindsay does not disclose that the give size of the window is "sixty-five kilobytes." Although Lindsay does not explicitly disclose the exact size of the window size, it would have been obvious to one of ordinary skill in the art at the time of invention as a matter of design choice to have a 65 KB window size. The reason being that window size is directly dependent on network characteristics. Any given network can only carry so much data. Since a motivation for using TCP is that the window in the TCP session is used to control congestion, this window inherently has a given maximum size that is dependent on the network. Therefore, a window size of 65 KB holds no distinct advantage over a window size of 35 KB in their respective networks.

Regarding claims 7, 16, and 25, Lindsay discloses, a given number of "transmission control protocol sessions are initiated (*figure 3, where the sequence number is used to control the number of TCP sessions*)." However, Lindsay lacks that there are exactly 100 TCP sessions initiated. Although Lindsay does not explicitly disclose that there are 100 TCP sessions, one of ordinary skill in the art would recognize that the number of TCP sessions is dependent on TCP header size, which is dependent on network characteristics. The sequence numbers of TCP can only go as high as number of sequence bits allow. For example, Lindsay allows for 4 bytes of data for sequence numbers. This allows for a finite number of bytes to be sequenced (i.e.

counted) and advantageously transmitted in any order and reassembled at the receiving end. Thus, 100 TCP sessions holds no advantage over 150 TCP sessions as they both are dependent on their respective network characteristics.

***Allowable Subject Matter***

7. Claims 4, 5, 8, 9, 22, 23, 26, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 13, 14, 17, and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

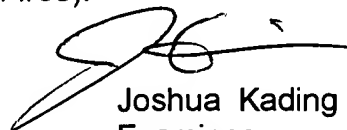
9. The following is a statement of reasons for the indication of allowable subject matter: Claims 28-33 are allowable because the prior art fails to teach, in combination with all other claim limitations, that in a TCP session, "dividing the current window size by said maximum size resulting in a success ratio" and further using the success ratio to determine a network congestion.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

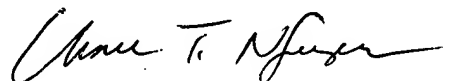
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading  
Examiner  
Art Unit 2661

July 18, 2005



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SUPERVISORY PATENT EXAMINER  
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